

From: DANIEL COZZA
To: ahlness, hauger, meyer
Date: 5/11/99 2:00pm
Subject: Wetland GW Sampling

5/11/99

Jon, Char and Mark: In talking with Jon yesterday, he asked me if the EPA would be interested in receiving split samples from the sampling of the recently installed wetland wells. I stated to Jon that we would be interested but was not sure if we had the resources (funding, lab space, etc.) to do so. Jon said that 20 wells would be sampled on a quarterly basis for only two metals (iron and manganese) and several other parameters. During our call, Jon was not sure of when the first round of sampling was to occur. During today's conference call, it was stated that the first round of wetland well sampling would be this Thursday and Friday. I do not believe that I can have our labs set up to accept samples for this round on this short notice, but based on conversations with our lab folks, I may be able to provide for analysis of split samples for the next couple of rounds. So from the lab space aspect, split sampling should be no problem, but I still need to work out some of the funding issues. Besides the funding issues, which I should have resolved shortly, the lab has several requests that must be met prior to receiving any split samples. Our Quality Control representative needs to review the work plan and Quality Assurance Project Plan being utilized by NMC for their samples, (EPA will use this plan, possibly with some modifications, to duplicate their methods). The only monitoring plan that I have is the NMC letter dated April 1, 1999 and this is very basic, often referring back to established NMC protocol. We will need copies of their protocols. As I asked in an e-mail to Char and Steve Eggers on April 14, has the COE developed any Data Quality Objectives for this work? Are you interested mainly in the water levels/hydrology data to be received from these wells or are we to be establishing a baseline on which to compare future/post-mine wetland water quality to, or both? If we are trying to establish a water quality baseline within the wetlands, which I thought was one of the goals of this monitoring plan, what was the rationale in eliminating all but two of the metals from the NMC work plan dated April 1, 1999? If clean techniques is the concern, why weren't clean techniques incorporated into the work plans? Don't NMC's "established protocol's" utilize clean techniques? For the purposes of establishing background, I do not believe an ultra-low level of detection is required. For biological purposes, ultra-low levels are too low to detect responses so usually, higher levels of detection are sufficient for baseline work. I would recommend that all the initial metal parameters be added back into this monitoring plan, unless other alternative monitoring is planned that will cover this issue.

I realize that the wetland wells will be dry or will not have enough water in them for a full complement of samples, let alone for splits, for some of the sampling periods. In Steve Donohue's e-mail to Mark on May 10, 1999, he requested a response to what parameters priority should be given in cases of not enough water in the well(s) to take all the samples. This is a hard question to answer without knowing what the purpose of the sampling actually is. If it is to find out what metals concentrations can potentially flow out of the wetlands and into Swamp Creek, then the metals (preferable the full scan) should be a priority. If it is to find out where the water is coming from, surface vs. groundwater, then nutrient parameters may be the priority. If the main purpose is for water levels and the other field parameters, then these should be taken first.

I will follow up with you as soon as I can with regard to EPA's ability to accept the split samples. Prior to this, and in addition to the above issues, we would need to coordinate with NMC the shipping of the samples, who would supply the sample bottles, shipping containers, appropriate labeling methods, chain-of-custody procedures, etc.

If you have any questions on the above, please give me a call. I will keep you posted from this end. Thanks

CC: coleman, eggers, oneill, tans, trick, CHRUSCICKI-J...